

APRIL/MAY 2024

**CMB62 — INDUSTRIAL MICROBIOLOGY**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. Define secondary screening.
2. Write any two preservation techniques used in Industrial Microbiology.
3. Define – Down stream processing.
4. List any four types of Bioreactor.
5. Which dairy product is relate to rennet?  
Who discover the single cell proteins?  
Write any two importance of the production of organic acids.
6. \*  
8. What is steroid transformation?
9. Name the organisms synthesizes the enzymes Amylase.
10. What is antibiotics?



SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain scope of Industrial Microbiology.

Or

(b) Demonstrate the preservation techniques of the production strain.

12. (a) Illustrate the media fermentation and sterilization.

Or

(b) Write shortly about the steps involved in downstream processing.

13. (a) Explain the general principles of the production of cheese.

Or

(b) Briefly explain the inoculum, production protocol and metabolic processes of Yoghurt.

14. (a) Explain the microbial production of Lactic acid.

Or

(b) Define steroid, add note on its transformations.

15. (a) Write short notes on Amylase.

Or

(b) Write shortly about streptomycin.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Write an essay about the history of Industrial Microbiology.

17. Write an essay about the fermentation process.

18. Write an essay about Single Cell Proteins (SCP).

19. Write an essay about amino acid production.

20. Write a detailed account on Antibiotic production reference with penicillin.

